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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/973,206	10/09/2001	John M. Harris	CE08991R	5804

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS
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CLEVELAND, OH 44143

EXAMINER	
LIOU, JONATHAN	

ART UNIT	PAPER NUMBER
2616	

DATE MAILED: 04/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/973,206	HARRIS, JOHN M.	
	Examiner	Art Unit	
	Jonathan Liou	2663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 February 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *9* is/are allowed.

6)☒ Claim(s) *1-8, 10-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

This Office action is in response to applicant's paper filed 02/06/2006. Claims 1-12 as amended are currently pending in the application. Applicant has amended claims 6 and 9, and cancelled claims 13-14. Claims 1-8, 10-12 stand rejected. Claim 9 is allowable.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claim 8 is rejected under 35 U.S.C. 102(e) as being anticipated by Butler et al. (US Pat. No. 6,545,989.)

3. As per claim 8, Butler teaches in a packet data communication system comprising a transmitting communication device and a receiving communication device that are each in wireless communication with a wireless infrastructure (**Butler teaches a system comprises a transmitter and receiver, and both are in a wireless communication system. See col 1, lines 15-19 and col 15, lines 54-67**). Butler also

teaches a method of conveying data from the transmitting communication device to the receiving communication device (**See col 12-13, lines 41-7**), comprising steps of:

establishing a reverse link between the transmitting communication device and the wireless infrastructure; (**col 12, lines 41-48.**)

establishing a forward link between the wireless infrastructure and the receiving communication device (**Butler teaches forwarding link is sent from the infrastructure to the receiving communication device. See col 13, lines 1-6**), wherein the reverse link is established prior to the establishment of the forward link (**See col 12-13, lines 41-7**); and signaling a user of the transmitting communication device to begin transmitting data prior to the establishment of the forward link (**Since the reverse link is prior the forward link, the transmitting communication device transmitted data prior to the establishment of the forward link. See col 12-13, lines 41-7.**) In addition, Fig. 1 and Fig. 4 are shown performing two legs of communication. Furthermore, reverse link could be considered as signaling. For example, a control signal would be send through reverse link prior forward link and the user would respond or negotiate such information are proper to used before sending replay on the forward link. Thus, reverse link could be interpreted as signaling.

4. Claim 10-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Shaffer et al. (US Pat. No. 6,683,889.)

5. As per claim 10, Shaffer et al. teach a method for determining a size of a jitter buffer (**Fig. 6**), comprising steps of:

Determining a number of retransmissions permitted of an erroneously received frame, and determining a size of the jitter buffer based on the determined number of permitted retransmissions (**Shaffer et al. teach the time interval information may then be analyzed to determine jitter characteristics for the jitter buffer. This includes analyzing the incoming packet rate, which could be interpreted as a number of retransmissions permitted. Then, Shaffer et al. also teach dynamically adjusts jitter buffer depth based on the analyzing information. See col 5, lines 14-22. In addition, applicant also stated that gaps result from the retransmission of erroneously received data. See page 2, lines 9-10.**)

6. As per claim 11, Shaffer et al. teach determining a number of bearer channels over which the frame is being transmitted (**Shaffer et al. teach determining the channel usage for call signaling and call set up, which could the call are considered the frames. See col 3, lines 36-37, and col 4, lines 41-65.**), and wherein the step of determining a size of a jitter buffer comprises a step of determining a size of a jitter buffer based on the determined number of permitted retransmissions and on the determined number of bearer channels (**Shaffer et al. teach to determine the jitter buffer size based on the packet arrival information, which could be the information, number of packet, the time period of silent, and the number channels usage in the buffer. See col 5, lines 23-40.**)

Claim Rejections – 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claim 1-2, 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaffer et al. (US Pat. No. 6,683,889.)

9. As per claim 1, Shaffer et al. teach a method for determining a jitter buffer depth target (**Fig. 6**). Shaffer et al. teach determining a radio frequency (RF) load metric and comparing this to an RF load threshold to produce a comparison in order to determine a jitter buffer depth target based on the comparison (**Shaffer et al. teach the packets are received into the jitter buffer, and the packets could be the audio signal, which could be interpreted as the radio frequency signal as claimed. See col 3, lines 33-41, and col 5, line 27. The packet received into the buffer is a load as claimed. Shaffer et al. also teach comparing this to threshold and determine the jitter buffer size. See col 5, lines 30-38. In addition, examiner interpreted the RF load metric as the characteristic between packet or inter-packet gap and an amount of data that is stored in a jitter buffer since RF load metric do not specifically defined in the claim language.**) Shaffer et al. does not specifically teach a radio frequency load metric corresponding to a base site. However, Shaffer et al. teach different audio codec to be used for implementing different received signal (**col 3, lines 32-45 and col 4, lines 14-27.**) Although Shaffer et al. does not specifically teach the received signal is according to the base site, Shaffer et al. teach to receive the

sequence audio packets, which need to be transmitted from other terminal or server via the base station as the basic telecommunication theory. Thus, it would have been obvious for one who have ordinary skill in the art at the time of the invention was made to determining a radio frequency load metric corresponding to a base site because Shaffer et al. teach audio codec to analysis the received audio signal (**col 3, lines 32-45 and col 4, lines 14-27.**)

10. As per claim 2, Shaffer et al. teach when the determined radio frequency (RF) load metric is greater than the RF load threshold, a jitter buffer depth target is used that is appropriate for a communication using retransmissions (**See Fig. 6. When the load is greater than T2, the jitter buffer depth target is used that is appropriate for a communication using retransmissions as the feedback shown in Fig. 6.**)

11. As per claim 4, Shaffer et al. teach determining retransmit erroneously received frames when the determined radio frequency (RF) load metric is greater than the RF load threshold. (**Shaffer et al. when the retransmission, the whole process would repeat; then, the retransmit packets in the jitter buffer would be reevaluated. Col 5-6, lines 23-4. Shaffer et al. teach measuring the gaps. Col 5, lines 28-30. As background section of application, applicant also stated that gaps result from the retransmission of erroneously received data. See page 2, lines 9-10.**)

12. Claims 3 and 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaffer et al. (US Pat. No. 6,683,889.) as applied to claim 1 above, and further in view of Kwan (US Pat. No. 6,504,838.)

13. As per claims 5 and 7, Shaffer et al. teach the method in the claim 1. Shaffer et al. does not specifically teach a jitter buffer depth target is used is appropriate for a communication using a reduced number of retransmissions and determining to reduce use of retransmissions when the determined load is less than threshold. However, Kwan teaches when the jitter buffer is below a predetermined threshold level, the clock logic reduces the transmission rate of the data pump transmitter (**col 63, lines 55-64, Kwan.**) By reducing the transmission rate, the number of retransmissions is also reduced. Kwan also teaches determining reduce the retransmission (**col 63, lines 45-54, Kwan.**) Since Kwan's invention teaches a method of transmitting data includes receiving data from a network, detecting network jitter from the received data, adding spoof data to the received when the detected network jitter exceeds a threshold, and transmitting the received data with the added spoof data to a telephony device (**col 1-2, lines 66-4, Kwan**); thus, it would have been obvious for one who have ordinary skill in the art at the time the invention was made to determining reduced number of retransmissions when the load is less than threshold.

14. As per claims 3 and 6, Kwan teaches the echo suppressor is used when the energy level of the line echo is below the audible threshold, otherwise an echo canceller is used. The echo suppressor is used because the noise is on acceptable level; thus, it is obvious in the ordinary skill in the art for the high power level could be used to transmit. The echo canceller is used because the noise is not in the acceptable level; thus, it is obvious in the ordinary skill in the art for the low power to be used while the load is greater than RF. The echo and noise effect are part of the jitter effect. Thus,

following the same rationale as applied to claim rejections 5 above, it would have been obvious for one who have ordinary skill in the art at the time the invention was made to transmit frames at a low or high power level by comparing the load with threshold.

15. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shaffer et al. (US Pat. No. 6,683,889.) as applied to claim 11 above, and further in view of Vaid et al (US Pat. No. 6,119,235.)

16. As per claim 12, Shaffer et al. teach the method claim 11 and determining a size of a jitter buffer comprises based on the determined number of permitted retransmissions and the round trip time period (**the round trip time period could be the time from the timer as Shaffer et al. taught. See col 3, lines 23-48.**) Shaffer et al. does not teach determining an amount of time that expires between the transmission of an acknowledgment of an erroneously received frame and a reception of a retransmitted frame in response to the acknowledgment over each of the traffic to produce a round trip time period recited in claim 12. However, Vaid et al. teach determining the round trip delay time as claimed (**col 3, lines 1-14, Vaid et al.**) Since Shaffer et al. teaches to determine the jitter buffer size could be based on time interval (**col 5, lines 41-49, Shaffer et al.**) and Vaid et al. suggest that the method of their invention could be implement on the jitter effects (**col 2, lines 5-13, Vaid et al.**), it would have been obvious for one who have ordinary skill in the art at the time the invention was made to determined number based on the round trip time period, which is produced by Vaid et al.'s method.

Allowable Subject Matter

17. Claim 9 is allowed.

Cited prior arts teach the method of establish a reverse, forward link and signaling. However, non of cited prior art teach or suggest to combined the system in claim 9 with when the determined quantity of data stored in the play-out buffer is less than a predetermined quantity, conveying at least a portion of the first set of data stored in the jitter buffer to9 the play-out buffer prior to determining that the first set of data is correct.

Response to Arguments

1. Applicant's arguments filed 02/06/2006 have been fully considered but they are not persuasive.

Regarding claim 1, applicant states Shaffer does not teach the features of claim 1 of determining an RF load metric corresponding to a base site and determining a jitter buffer depth target based on comparison of RF load to an threshold (See col 5, lines 30-38, Shaffer) The rationale and basis as applied in the rejection of claim 1 in office action are applied to the remainder. In addition, examiner interpreted the RF load metric as the characteristic between packet or inter-packet gap and an amount of data that is stored in a jitter buffer since RF load metric do not specifically defined in the claim language. In the page 9 of Remark, applicant states that "for example, an amount of data stored in a jitter buffer is something that can be observed only after a call is in progress. By contrast, an RF load metric can be observed before a call actually begins and thus claim 1 teaches a jitter buffer depth that may be set before the call starts and before any observations, and speech sequences leading to audio degradation, have

occurred." However, those limitations applied to RF load do not appear in the claim language. Thus, Shaffer teach determining an RF load and a jitter buffer depth target based on comparison of RF load to an threshold.

Regarding claims 4 and 9, applicant stated Shaffer fail to teaches nothing concerning retransmission. However, Shaffer teach measuring gaps (col 5, lines 29-30, Shaffer et al.) It's well known the gaps are often result from the retransmission of interpackets. In addition, applicant states in the background section, the gaps result from the retransmission of erroneously received data. See page 2, lines 9-10.

Regarding claim 8, applicant stated that Butler only teach a single leg of a communication session, and not teach both leg of communication session. The communication between Fig. 1 and Fig. 4 are considered as two leg communication (See Fig. 1, 4 and col 12, lines 41-7, Butler.) Applicant states that Butler fail to teach reverse link and forward link. Butler teach forward link and reverse link and also reverse link is established prior forward link (See col 12-13, lines 41-7, Butler.) Furthermore, reverse link could be considered as signaling. For example, a control signal would be send through reverse link prior forward link and the user would respond or negotiate such information are proper to used before sending replay on the forward link. Thus, reverse link could be interpreted as signaling.

In view of discussion above, applicant believed the feature of independent claims have been taught by Shaffer et al. or Butler inherently or directly. Thus, Claims 1-8, 10-12 stand rejected

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan Liou whose telephone number is 571-272-8136. The examiner can normally be reached on 8:00AM - 5:00PM Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ajit Patel
Primary Examiner

Jonathan Liou

4/13/2006